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EXAMINER

FERGUSON, LAWRENCE D

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1774

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Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 20040415

Application Number: 09/737,413
Filing Date: December 14, 2000
Appellant(s): BADESHA ET AL.

Annette L. Bade
For Appellant

EXAMINER'S ANSWER

MAILED
APR 21 2004
GROUP 1700

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This is in response to the appeal brief filed January 12, 2004.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1-21 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

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(9) Prior Art of Record

5846643	BADESHA ET AL.	12-1998
6482504	BADESHA ET AL.	11-2002
6381436	SWIFT ET AL.	4-2002

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections – 35 USC § 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 and 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Badesha et al (U.S. 5,846,643) in view of Swift et al (U.S. 6,381,436).

Badesha teaches the conventionality of an image forming electrostatographic apparatus for forming images on a support comprising a development component, a transfer component and a fixing component (column 1, lines 16-48) having an intermediate component (column 3, lines 44-45). Badesha discloses an

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electrostatographic printing apparatus comprising a silicone elastomer and a mica type layered silicate, said silicone elastomer and mica-type layered silicate forming a delaminated nanocomposite (column 4, lines 1-5) where the silicone elastomer is a polyorganosiloxane wherein the polyorganosiloxane has the same formula displayed in claim 7, where R is hydrogen or substituted or unsubstituted alkyl, alkenyl or aryl having less than 19 carbon atoms, each of A and B may be any of methyl, hydroxy or vinyl groups and $0 < m/n < 1$ and $m+n > 350$ (column 4, lines 10-24). Additionally, the reference has the same formula limitation presented in claim 2, where W is usually potassium; X, Y are aluminum, magnesium, iron or lithium and Z is silicon or aluminum (column 5, lines 40-46). Badesha discloses the formula in claim 9 where n" is 350 to 2700 (column 7, lines 1-10). Badesha discloses 10% weight of the mica-type silicate (column 5, lines 9-10) where the mica-type silicate comprises hectorite (column 14, lines 9-10). An image *for forming images on a recording medium* is directed to intended use. A transfer component *for transferring said developed image from said charge-retentive surface to an intermediate transfer component* and an intermediate transfer component *for receiving said developed image from said transfer component* are also directed to intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*,

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136 USPQ 458, 459 (CCPA 1963). A development component *to apply a developer material to said charge-retentive surface to develop said electrostatic latent image to form a developed image on said charge-retentive surface* is a product by process claim limitation. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966. Although Badesha teaches transferring, the reference does not explicitly teach a transfix member.

Swift teaches an image forming apparatus comprising a charging station, developer, transfer station and intermediate transfer belt that transfer toner to a fuser or transfix component (column 4, lines 39-47) having an adhesive disposed therein (column 4, lines 49-57). Badesha and Swift are analogous art because they are both from the field of image forming machines. It would have been obvious to one of ordinary skill in the art to include the transfix component of Swift in the image forming apparatus of Badesha because Swift teaches interchanging the fuser and a transfix component in order to receive toner to be fixed to a substrate (column 4, lines 39-49).

Claim Rejections – 35 USC § 103(a)

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Claims 1-17 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Badesha et al (U.S. 5,846,643) in view of Badesha et al. (U.S. 6,482,504).

Badesha teaches the conventionality of an image forming electrostatographic apparatus for forming images on a support comprising a development component, a transfer component and a fixing component (column 1, lines 16-48) having an intermediate component (column 3, lines 44-45). Badesha discloses an electrostatographic printing apparatus comprising a silicone elastomer and a mica type layered silicate, said silicone elastomer and mica-type layered silicate forming a delaminated nanocomposite (column 4, lines 1-5) where the silicone elastomer is a polyorganosiloxane wherein the polyorganosiloxane has the same formula displayed in claim 7, where R is hydrogen or substituted or unsubstituted alkyl, alkenyl or aryl having less than 19 carbon atoms, each of A and B may be any of methyl, hydroxy or vinyl groups and $0 < m/n < 1$ and $m+n > 350$ (column 4, lines 10-24). Additionally, the reference has the same formula limitation presented in claim 2, where W is usually potassium; X, Y are aluminum, magnesium, iron or lithium and Z is silicon or aluminum (column 5, lines 40-46). Badesha discloses the formula in claim 9 where n" is 350 to 2700 (column 7, lines 1-10). Badesha discloses 10% weight of the mica-type silicate (column 5, lines 9-10) where the mica-type silicate comprises hectorite (column 14, lines 9-10). An image *for forming images on a recording medium* is directed to intended use. A transfer component *for transferring said developed image from said charge-*

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retentive surface to an intermediate transfer component and an intermediate transfer component for receiving said developed image from said transfer component are also directed to intended use. A transfer component *for transferring said developed image from said charge-retentive surface to an intermediate transfer component* and an intermediate transfer component *for receiving said developed image from said transfer component* are also directed to intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). A development component *to apply a developer material to said charge-retentive surface to develop said electrostatic latent image to form a developed image on said charge-retentive surface* is a product by process claim limitation. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966. Although Badesha teaches transferring, the reference does not explicitly teach a transfix member comprising a transfix substrate comprising a fabric.

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Badesha '504 teaches an image forming apparatus comprising a charge-retentive surface, a development component and a transfix member (column 3, lines 44-59). Badesha '504 further teaches a transfix member, wherein said substrate comprises a material selected from the group consisting of fabrics and metals, where the fabric material is selected from the group consisting of graphite fabric, fiberglass, cellulose and polyethylene (column 10, lines 39-48) where the transfix member comprises silicone material and a heating component associated with said substrate (column 10, lines 52-65). Badesha '643 and Badesha '504 are analogous because they are both from the field of image forming apparatus. It would have been obvious to one of ordinary skill in the art to include a transfix substrate comprising a fabric comprising a material selected from the group consisting of fabrics and metals, where the fabric material is selected from the group consisting of graphite fabric, fiberglass, cellulose and polyethylene in the image forming apparatus of Badesha '643 because Badesha '504 teaches the transfix component transfers and fuses the developed image (column 3, lines 50-51) where the fabric material improves mechanical strength and electrical insulating properties (column 8, lines 31-32).

(11) Response to Argument**Issue 1**

Appellant maintains that claims 1-10 and 13-21 are not unpatentable over Badesha et al. (U.S. 5,846,643) in view of Swift et al. (U.S. 6,381,436). Appellant maintains there is no prima facie case of obviousness because the references taken alone, and in combination, do not teach or suggest an imaging member comprising a

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three member apparatus. The Examiner maintains Badesha an image forming electrostatographic apparatus for forming images on a support comprising a development component, a transfer component and a fixing component (column 1, lines 16-48) having an intermediate component (column 3, lines 44-45) and Swift teaches an image forming apparatus comprising a charging station, developer, transfer station and intermediate transfer belt that transfer toner to a fuser or transfix component (column 4, lines 39-47) having an adhesive disposed therein (column 4, lines 49-57). The two references used in the rejection are from the same field of endeavor. Each apparatus have components which have the same function. Appellant maintains Badesha does not teach or suggest a transfer member or intermediate transfer component as claimed. Badesha teaches an image forming apparatus for forming images on a support comprising a development component, a transfer component and a fixing component (column 1, lines 16-48) having an intermediate component (column 3, lines 44-45). Appellant maintains Badesha does not teach or suggest a transfix component, but relates to a fuser member. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (C In this instance, the fuser member and transfix component have been shown to function equivalently. Swift teaches an image forming apparatus comprising a charging station, developer, transfer station and intermediate transfer belt that transfer toner to a fuser or transfix component (column 4, lines 39-47) having an adhesive disposed therein (column 4, lines 49-57). Examiner maintains it would have

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been obvious to one of ordinary skill in the art to include the transfix component of Swift in the image forming apparatus of Badesha because Swift teaches interchanging the fuser and a transfix component in order to receive toner to be fixed to a substrate (column 4, lines 39-49). This constitutes a transfer member. Although named differently, the same function is practiced. Appellant maintains the intermediate support layer of Badesha is for the fusing member and is not related to the intermediate transfer member as claimed. Examiner maintains Badesha meets this claim limitation because the intermediate support layer is comprised within the image forming apparatus. Appellant maintains Badesha does not teach using the outer layer as an outer layer for a transfix component. Badesha does not teach this limitation but Swift teaches the same outer layer, which has the same function. It would have been obvious to one of ordinary skill in the art to include the outer layer containing mica type layered silicate and silicone elastomer in the transfix component of Swift in order to improve the resiliency of the transfix member.

Appellant maintains Swift does not cure the deficiencies of Badesha because it fails to teach or suggest a transfer member in addition to an intermediate transfer member. Swift teaches an image forming apparatus comprising transfer station and intermediate transfer belt that transfers toner to a fuser or transfix component (column 4, lines 39-47). Appellant maintains there is no suggestion to modify or combine the references because there is no teaching or suggestion to use the mica type layered silicate material of Badesha as an outer layer of the transfix component of Swift. However, the mica type silica layer has the same function Examiner contends it would

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have been obvious to one of ordinary skill in the art to include the outer layer containing mica type layered silicate and silicone elastomer in the transfix component of Swift in order to improve the resiliency of the transfix member.

Appellant states a fuser member and transfix member have different electrical, mechanical, and chemical requirements for the layers. Examiner maintains the fuser member and transfix member, (although not named the same) are functional equivalents, as taught by Swift. Because they are functional equivalents it would have been obvious to one of ordinary skill in the art to include the outer layer of elastomeric material on the transfix member of Swift. Appellants maintain there is no reasonable expectation of success because a fuser member and transfix component are different because a transfix component must have the ability to attract toner, transfer toner and fix it to a substrate. There is certainly some reasonable expectation of success since the two components have been shown to be used interchangeably and the function of each is shown. Examiner maintains Badesha contains a transfer and fixing component (column 1, lines 16-48) where the mica type layered silicate attracts the toner material.

Issue 2

Appellant maintains that claims 1-17 and 20-21 are not unpatentable over Badesha et al. (U.S. 5,846,643) in view of Badesha et al. (U.S. 6,482,504). Appellant maintains there is no prima facie case of obviousness because Badesha '643 does not teach or suggest a transfer member or intermediate transfer component as claimed.

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Badesha '643 teaches an image forming apparatus for forming images on a support comprising a development component, a transfer component and a fixing component (column 1, lines 16-48) having an intermediate component (column 3, lines 44-45). Appellant further maintains Badesha '643 does not teach a transfix component. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Swift teaches an image forming apparatus comprising a charging station, developer, transfer station and intermediate transfer belt that transfer toner to a fuser or transfix component (column 4, lines 39-47) having an adhesive disposed therein (column 4, lines 49-57). Examiner maintains it would have been obvious to one of ordinary skill in the art to include the transfix component of Swift in the image forming apparatus of Badesha because Swift teaches interchanging the fuser and a transfix component in order to receive toner to be fixed to a substrate (column 4, lines 39-49). Appellant maintains Badesha '504 does not teach or suggest a mica-type layered silicate as claimed. Badesha teaches functional silicone material in the transfix component (column 10, lines 52-64) which is similar to the mica-type silicate material taught in Badesha '643. Appellant maintains the fuser member of Badesha '643 cannot transfer toner. Badesha '643 teaches a transfer component and furthermore, the transfix component of Badesha '504 is also capable of transferring toner.

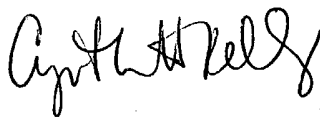
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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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April 19, 2004

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